LA-UR-22-20266

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Title: Celebrate Valentine's Day with three early Lab love stories

Author(s): Templeton, Patricia A.

Intended for: Web

Issued: 2022-01-12









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Celebrate Valentine's Day with three early Lab love stories

A lost love, an international escape and an intentional friendship By Patty Templeton, archivist, <u>National Security Research Center</u>

This Valentine's Day revel in several remarkable relationships that occurred leading up to and during the Manhattan Project, the United States government's effort to build the atomic bomb and help end World War II. Further details of the lives and work of early Lab staff can be found in the legacy collections housed at the National Security Research Center, LANL's classified library and curator of unclassified legacy items.

Edith Warner and Tilano Montoya

During the Manhattan Project, Edith Warner ran a tea room open only to Los Alamos staff – but she didn't do it alone. Warner <u>baked cakes</u> and served scientists while Tilano Montoya procured well water, kept the woodstove fed and assisted as needed. Their regulars included physicists like Lab director J. Robert Oppenheimer, Niels Bohr and Enrico Fermi, who made reservations using pseudonyms and kept their conversations unclassified.

Warner and Montoya met when she hired him to build an adobe fireplace in 1928. Soon after, they were roommates. Warner was in her mid-30s, unmarried and the freight agent for the Los Alamos Ranch School, a private school on the mesa that became the site of the Laboratory. For \$25 a month, Warner secured shipments at the Chili Line's Otowi Crossing stop. The tea room was her side business, until scientists from up the hill made it her mainstay. Montoya, who was 20 years older than Warner, was a former governor of the nearby San Ildefonso Pueblo. In his younger years, he danced his way across London, Paris, Rome and Berlin after San Ildefonso dancers were seen at Coney Island. Montoya later returned to New Mexico and worked as a carpenter known for his kindness and storytelling.

Together they ran the tea room through 1946, though WWII ended in September 1945 and many of their most-famous diners had left Los Alamos.

Warner and Montoya never publicly shared if theirs was a platonic or romantic partnership. What is certain is they spent decades together at the house at Otowi Crossing. Then, in 1951, Warner died of cancer. Before she left the world, Warner mail-ordered two years' worth of blue jeans from Montgomery Ward for Tilano.

He passed away almost exactly two years later.

Laura and Enrico Fermi

In 1927, physicist Enrico Fermi told a friend, "...he felt like doing something out of the ordinary, something definitely extravagant: either to buy a car or to take a wife," according to *Atoms in the Family*.

To Laura Capon's disappointment, Fermi bought a yellow Peugeot Bébé. Her worry was for naught, Fermi soon proposed. Then he was late for their wedding. Fermi's dress shirt sleeves dangled three inches below his fingertips. He spent the morning sewing.

For 10 years, the Fermis lived in Rome. They had two children. Fermi was a professor of theoretical physics at the University of Rome, where he conducted the experiments that led to his 1938 Nobel Prize in Physics. The prize came at an opportune time. In 1938, Nazi-allied Italy passed its first antisemitic laws. Laura and the children were Jewish, though the children's passports read as Catholic. The Fermis decided to emigrate to America.

Fermi wrote four letters to four American universities and mailed them from four towns. He received five job offers and accepted Columbia University's. To secure travel, Fermi lied to Italian officials, stating he had a six-month teaching sabbatical in New York. According to Fermi biographer David N. Schwartz, Laura converted to Catholicism, was remarried to Enrico by a priest and renewed her passport as a Catholic. On December 6, 1938, the family departed by train for Stockholm, where Enrico would collect his Nobel Prize.

The train crossed an Italian checkpoint without incident. Then came a German checkpoint. Recounted in Laura's 1954 memoir, *Atoms in the Family*, the guard stood, "stiff and official, a personification of our past and present anxieties. He turned our passports in his hands searchingly and appeared unsatisfied." The visa was missing. Young Nella loudly asked what took so long, what was wrong and, "Would the man send them back to Rome and Mussolini?" Fermi asked to assist the guard. He turned pages until the visa appeared. The guard relaxed. The Fermis continued to the Nobel Prize ceremony. Afterward, they boarded the Franconia for America, arriving on January 2, 1939.

By 1942, Fermi supervised the first self-sustaining nuclear reaction (<u>Chicago Pile-1</u>) at the University of Chicago Met Lab – a precursor to the development of the atomic bombs in Los Alamos. In 1944, Oppenheimer recruited him as an associate Lab director at Los Alamos and Laura to assist Dr. Louis Hempelmann in the Health Group.

As soon as Fermi was allowed to share his work at Los Alamos with Laura, he did. He handed her a mimeographed book shortly after the end of WWII and said, "It may interest you to see the *Smyth Report*. It contains all declassified information on atomic energy. It was just released for publication, and this is an advance copy."

Arline and Richard Feynman

Before Richard Feynman was the Nobel Prize-winning theoretical physicist who played bongo drums, was fascinated with Tuvan throat singing and wrote memoirs that helped popularize science in the 20th century, he was a 15-year-old kid from Far Rockaway, New York, who fell in love with a girl named Arline Greenbaum. They dated from high school through his doctoral program at Princeton University.

During their courtship, Arline was consistently sick. Doctors finally identified the lumps, fevers and fatigue as tuberculosis. Though their families didn't approve, Feynman and Greenbaum got married on June 29, 1942 in a Staten Island city office. Fearing infection, Feynman kissed Arline on the cheek.

There was no honeymoon – there was work. Feynman was recruited for Project Y, the top-secret Los Alamos lab of the Manhattan Project, but wouldn't commit until he was assured Arline could come to New Mexico and he could visit her weekly. Oppenheimer secured Arline a room at Southwest Presbyterian Sanatorium in Albuquerque. The newlyweds arrived in New

Mexico in March 1943. Each weekend, Feynman borrowed a car or hitchhiked 200 miles round trip to see her. In between, they wrote one another, often in code or jigsaw puzzle piece letters, which infuriated wartime censors checking mail in an effort to keep Lab activities secret.

Arline continued to impishly woo Feynman. In May 1945, she flooded Los Alamos with fake newspapers. Feynman later recounted in an authorized biography, "The whole damn place was full of them – hundreds of newspapers. You know the kind – you open it up and there's this headline screaming in thick letters across the front page: ENTIRE NATION CELEBRATES BIRTHDAY OF R. P. FEYNMAN!"

A month later, Richard wrote her, "This time will pass – you will get better. You don't believe it, but I do." Ten days later, Feynman received a phone call from Arline's father to come quickly. Feynman borrowed a car from his friend (and later-confirmed Soviet spy) Klaus Fuchs. He picked up two hitchhikers in case he needed help changing a flat tire. He got three, with the last flat about 30 miles outside of Albuquerque. He hitchhiked the rest of the way and made it in time to say goodbye. Arline died on June 16, 1945.

In 1988, months after Feynman had died at age 69 from abdominal cancer, biographer James Gleick found a <u>letter</u> from Feynman to Arline, dated October 17, 1946. Feynman wrote, "I find it hard to understand in my mind what it means to love you after you are dead – but I still want to comfort and take care of you – and I want you to love me and care for me. I want to have problems to discuss with you – I want to do little projects with you." He continued, "I am alone without you and you were the 'idea-woman' and general instigator of all our wild adventures."

In Perfectly Reasonable Deviations from the Beaten Track: The Letters of Richard P. Feynman, his daughter Michelle commented, "The letter is well worn – much more so than others – and it appears as though he reread it often."

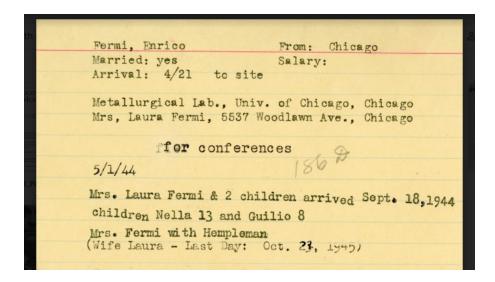
Want more stories from the Lab's past, like a Manhattan Project <u>wedding</u> ceremony starring Oppenheimer? Visit the NSRC's <u>website</u> to read, listen and watch.

IMAGES



CAPTION: Edith Warner and Tilano Montoya, pictured here in 1948, ran a tea room frequented by the Lab's famed wartime physicists. Warner wrote to Peggy Pond Church, "After weeks in a hospital it is especially wonderful to be here in Tilano's room...It is a good place in which to wait for the passing from a rich, full life into whatever work lies beyond." Image from the Palace of the Governors Photo Archives (NMHM/DCA), Unknown photographer, Negative 047541.

https://drive.google.com/file/d/15WfedVfYq2I6Km7Cn1hWczIM_s9sPfZf/view?usp=sharing



CAPTION: Dorothy McKibbin, the "Gatekeeper of Los Alamos," filled out an index card for every new hire that came through her office during the Manhattan Project. This is Enrico and Laura Fermi's McKibbin Card. Laura Fermi discusses Los Alamos life in a 1975 lecture, later reprinted in the book <u>Reminiscences of Los Alamos</u>, 1943-1945. To listen to the digitized lecture, contact the NSRC.

https://drive.google.com/file/d/1VXjWp7DdDDSuaCp0e6X3bo6WyHwWLTys/view?usp=sharing



CAPTION: Enrico Fermi circa 1944 hiking near Los Alamos. In *Atoms in the Family*, Laura Fermi said of leaving Italy, "The Italian government seemed to have gone crazy. New laws, rules, and directives came forth daily, at random, as if their exclusive purpose were to prove the all-powerfulness of the Fascist god."

https://drive.google.com/file/d/1JFN1I_3bhqL-tkbuWmarykERFdbWnc85/view?usp=sharing



CAPTION: This photo by the Society of Nuclear Medicine was taken at a 1977 award ceremony and published in the former Lab magazine, *The Atom*. At center, Laura Fermi accepts the Nuclear Pioneer plaque on behalf of the Chicago Pile-1 group. Enrico Fermi, who died in 1954, led the group. You can peruse *The Atom* <u>digitally</u>.

https://drive.google.com/file/d/1rYDO9 2MOzRhMNYujpZ2QAzD1ajdjSkx/view?usp=sharing



CAPTION: Arline Feynman briefly moved to the Los Alamos hospital (pictured) so the couple had more time together. It didn't work out. Feynman wrote in a February 1945 letter, "She is worried, and I think not too unjustly, that she will cough too much some time and ring for the nurse and she'll choke before the 15 or 20 min it sometimes takes the nurse to come." https://drive.google.com/file/d/1VbMyvA9JLb zmPXL1zuJ9ihAY9mRJLgT/view?usp=sharing



CAPTION: Richard Feynman (facing camera) and Lab director J. Robert Oppenheimer (right, with cigarette). Feynman was 24 when recruited to the Manhattan Project. He worked with Hans Bethe in the Theoretical Division.

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CAPTION: Arline and Richard Feynman in 1945 at Southwest Presbyterian Sanatorium. On March 26, 1943, Arline wrote to Richard of her excitement to, "hang curtains and camp out in a tent, have 'teas' for your students, and a chess game before our open fireplace in winter, showers in the summer and Sunday morning in bed reading the funnies." She continued, "Dearest I could go on indefinitely – there is so much left in life for us to share and explore together." Arline died from tuberculosis on June 16, 1945. Richard Feynman used with permission from Michelle Feynman and Carl Feynman.

LINK TO TIFF FAMILY GAVE:

https://drive.google.com/file/d/1clBppGwtFn_li1lSc6njJfDP5zAr-CiS/view?usp=sharing

LINK TO WEBP VERSION (NOT SURE WHICH ONE IS BIGGER): (Also not sure how to convert WebP image to Jpeg or TIFF) https://drive.google.com/file/d/1ACl6uu-bHkvsr-vd51spZGEUW0qV- 0C/view?usp=sharing